

# Georgia Tech Research Corp. Invention Disclosure Form

OTL USE ONLY

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Atlanta, GA 30332-0415

Login Date:  
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Please complete all items and return to the above address. If you have any questions, please call (404)894-6287.

## Title

Title of Invention: Multi-User Touch Table

Short Title: MUTT

## Previous Invention

Is this invention related to a previous invention disclosed to the OTL? ☐ Yes ☒ No

If yes, Title:

GTRC ID:

## Inventors

- ❖ Inventors should include only those persons that are believed to have contributed to the concepts included in the invention. Please make your best effort at this time to include all inventors. Should OTL proceed with patent filing, patent counsel will separately investigate and make a final legal determination of inventorship of patent applications in accordance with applicable patent laws.
- ❖ The "Contribution %" should reflect each inventor's contribution to the concepts of the invention and be agreed upon by all inventors. (If the inventors cannot agree to contribution percentages, the OTL will assume an equal distribution.)
- ❖ **Use additional sheets as necessary.**

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Citizenship: US

Title:

Department: ISyE

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Contribution %: 25%

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### Execution by Inventor(s):

I/We inventor(s) hereby solemnly swear and affirm under oath that I/we am/are the only inventor(s) of this invention and that I/we have not knowingly omitted the inclusion of any other inventor(s) besides me/us, and that the information provided in this disclosure is, to the best of my/our knowledge, true and accurate.

Signature:



Date: 12/12/07

Full Name: Michelle Williams-Davis

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<b>Execution by Inventor(s):</b> I/We inventor(s) hereby solemnly swear and affirm under oath that I/we am/are the only inventor(s) of this invention and that I/we have not knowingly omitted the inclusion of any other inventor(s) besides me/us, and that the information provided in this disclosure is, to the best of my/our knowledge, true and accurate.		Signature: 	Date: 12/12/07
Full Name: Fahad Al-Emam		Citizenship: Saudi Arabia	
Title:		Department: College of Computing	
Mail Code:		Contribution %: 25%	
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<b>Execution by Inventor(s):</b> I/We inventor(s) hereby solemnly swear and affirm under oath that I/we am/are the only inventor(s) of this invention and that I/we have not knowingly omitted the inclusion of any other inventor(s) besides me/us, and that the information provided in this disclosure is, to the best of my/our knowledge, true and accurate.		Signature: 	Date: 12/12/07
Full Name: Randeep Ramamurthy		Citizenship: INDIA	
Title:		Department: ISyE	
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Office Address:  Phone: (        ) Fax: (        ) Email:		Home Address: 620 Peachtree St NE APT 813 Atlanta GA 30308  Phone: (404) 428-7710 Fax: (        ) Email: randeep@gatech.edu	
<b>Execution by Inventor(s):</b> I/We inventor(s) hereby solemnly swear and affirm under oath that I/we am/are the only inventor(s) of this invention and that I/we have not knowingly omitted the inclusion of any other inventor(s) besides me/us, and that the information provided in this disclosure is, to the best of my/our knowledge, true and accurate.		Signature: 	Date: 12/12/07

## Invention Description

### Brief Description:

Developed a table that integrates 3 technologies at once. We first projected a display from a computer onto a translucent table. Second we attached a touch screen that interoperates user interaction (by touch) and translates it into mouse movements and clicks. Finally we attached an RFID scanner to the computer & used the tags (RFID tags).

Furthermore, we developed applications that are executed based on the RFID tags that are recognized by the system.

Applications are listed below:

- X-rays, medical records, lab reports can be pulled from the clinician's hand-held device onto the table. A RFID smart tag associated with the hand-held device triggers the appropriate application when the clinician places the device on the table. A screen shot of the application is shown. The application allows one to flip the orientation of the records or x-rays so that it will be easier for the person on the other side of the table to view it. Also one can zoom any desired portion of the x-ray. Thus this application supports interactive display and communication for shared decision making.
- An interactive learning tool describes the information about the spacer and MDI inhalers. Also step-by-step instructions about the inhaler usage are described. The inhalers have RFID tags attached to them and they invoke the appropriate instructional material when a particular type of inhaler is placed on the table.
- Finger painting application developed using JAVA is available. This serves as a very good source of positive distraction for the children in the hospital environment. Asthma trigger game educates the children interactively about different asthma trigger sources that one comes across in everyday life. A screen shot of the asthma trigger game is shown.
- Parents can transfer information about medical conditions and also the usage information from the surface computer to their PDA. The RFID technology is used for this solution also. Also, the application is flexible to let the parents print copies of the information if they choose to. The application also groups the relevant information about a particular topic so that the user can easily navigate to the required information.

(PLEASE ATTACH MORE DETAILED DESCRIPTIONS, ANY SUPPORT MATERIALS, REPORTS AND PROPOSED PUBLICATION).

### Source of Support

Did this invention result from sponsored research? ☐ Yes ☒ No

If NO, how was this work funded, including salaries, charges of time, materials, supplies, equipment?

If YES, please provide information on all:

Sponsor: GIT Project Number/PeopleSoft No.:

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Was this project funded through a Center with Industry Membership? For example, PRC, IPST, GEDC, etc.

☐ Yes ☒ No If YES, list name of Center. \_\_\_\_\_

Did you use any material obtained from another party in developing this technology?

☐ Yes ☒ No If YES, please provide all appropriate licenses and agreements.

### Establishment of Invention History

❖ Please provide your best estimate for the date when the following occurred (will occur):

Date:(mm/dd/yy)	
10/20/07	A. Conception of Invention
10/30/07	B. First written description (please attach a copy if available)
10/30/07	C. First non-confidential disclosure (e.g. abstract, proposal, paper submission, talk, or meeting with industry – please attach a copy if available) To whom: Pediatric Health Center of the Future Class
12/3/07	D. Completion of model or prototype
12/4/07	E. First successful operational test

F. Is a publication, paper, or other disclosure planned within 6 months? ☐ Yes ☒ No

If YES, Disclosure Date:

Type of disclosure:

### Prior Art

Please conduct a literature and patent search and attach a list of all relevant patents and publications. Two useful sites for patents searches are:

- 1) [www.uspto.gov.patft/index.html](http://www.uspto.gov.patft/index.html)
- 2) [www.surfip.gov.sg](http://www.surfip.gov.sg)

Please explain differences or advantages over prior art.

### Commercialization Potential

- A. What are the commercial applications for the invention?  
For use in pediatric hospitals
- B. What are the limitations that must be overcome prior to practical application?  
Implementation of Electronic medical records
- C. What are the advantages of the invention versus present technologies?  
Sharing of information for patient centered care
- D. Please provide any available data or information on market potential/size.
- E. Is work on the invention continuing? ☐ Yes ☒ No If Yes, please provide source of on-going funding.
- F. Do you know of any appropriate industrial organizations that may be interested in licensing this technology? (Please attach additional sheet if more space is required.) No

Company Name	Contact Person	Contact Information

### Execution by Witnesses

❖ This disclosure should be witnessed by two individuals who are not co-inventors and who are technically qualified to understand the subject matter.

	Print Name	Signature	Date
I have read this invention disclosure (including the attached pages, if any) and understand its subject matter			
I have read this invention disclosure (including the attached pages, if any) and understand its subject matter			